

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

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| REC'D | 06 OCT 2004 |
| WIPO | PCT |

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| Applicant's or agent's file reference AD6899PCT | FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416) | |
| International application No. PCT/US 03/24116 | International filing date (day/month/year) 31.07.2003 | Priority date (day/month/year) 31.07.2002 |
| International Patent Classification (IPC) or both national classification and IPC B41M5/00 | | |
| Applicant E.I. DU PONT DE NEMOURS AND COMPANY ET AL. | | |

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:
 - I Basis of the opinion
 - II Priority
 - III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - IV Lack of unity of invention
 - V Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - VI Certain documents cited
 - VII Certain defects in the international application
 - VIII Certain observations on the international application

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| Date of submission of the demand 23.02.2004 | Date of completion of this report 05.10.2004 |
| Name and mailing address of the International preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 | Authorized Officer Spyropoulou, E Telephone No. +49 89 2399-2843 |



**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/US 03/24116

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-11 as originally filed

Claims, Numbers

1-22 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- the language of publication of the international application (under Rule 48.3(b)).
- the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- contained in the international application in written form.
- filed together with the international application in computer readable form.
- furnished subsequently to this Authority in written form.
- furnished subsequently to this Authority in computer readable form.
- The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- the description, pages:
- the claims, Nos.:
- the drawings, sheets:

5. This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

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EXAMINATION REPORT**

International application No. PCT/US 03/24116

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

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|-------------------------------|------|--------|------------|
| Novelty (N) | Yes: | Claims | 9-15,21,22 |
| | No: | Claims | 1-7,20 |
| Inventive step (IS) | Yes: | Claims | |
| | No: | Claims | 1-8,16,20 |
| Industrial applicability (IA) | Yes: | Claims | 1-22 |
| | No: | Claims | |

2. Citations and explanations

see separate sheet

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EXAMINATION REPORT - SEPARATE SHEET**

International application No. PCT/US 03/24116

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

Reference is made to the following documents:

D1: EP-A-1114734

D2: JP(A) 2000355163 and its computerised English translation

1). From D1 and D2, a layer is known which is printed by ink jet, said layer described as "protective layer" and being a rigid elastomer for example an ethylene-acrylic rubber or butyl rubber (see D1, paragraph 435 and D2 abstract) and having the rigidity characteristics measured according to Young's Modulus and the thickness as defined in claim 1 of the present application (see D1, paragraphs 438 and 442 and D2, paragraphs 26,27).

A process for ink-jet printing an image on a rigid thermoplastic "interlayer" according to claim 1 and a thermoplastic "interlayer sheet" bearing an ink-jet printed image according to claim 20 are already disclosed in D1 and D2 and therefore not novel.

Claim 8 defines a process for obtaining a decorative laminate comprising the steps of laminating an ink jet printed interlayer sheet according to claim 1, between sheets of transparent materials to obtain a decorative laminate.

It is however a common measure in the art to protect a printed matter by laminating a transparent material on one or both of its surfaces.

The idea of laminating an ink jet printed matter between two transparent materials and thus the subject matter of claim 8 does not therefore involve an inventive step.

2). Dependent claims 2-7, 21 and 22 do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step in view of the teachings of D1 and D2.

Moreover claim 22 defines the interlayer by the change of size of the image after drying. This is a definition of the interlayer by the result to be achieved leading to lack of clarity of said claim 22 (see PCT/GL/ISPE/1 5.35).

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3). The process for obtaining a decorative laminate according to claim 9 differs from the disclosure of D1 and D2 in that the rigid interlayer comprises a roughened surface having a roughness (Rz) of from 5 µm to 15 µm prior to lamination.

The subject matter of claim 9 and of claims 10-15, said claims depending on claim 9, appears to contain features which, if combined with the subject matter of claim 8 on which the above mentioned claims depend on, would meet the requirements of the PCT in respect of novelty and/or inventive step.